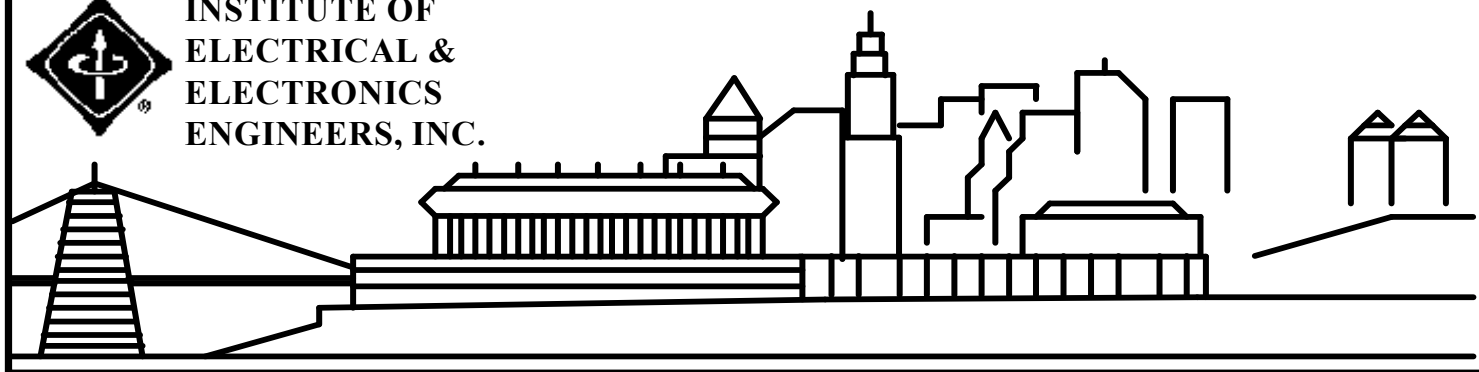




**INSTITUTE OF
ELECTRICAL &
ELECTRONICS
ENGINEERS, INC.**



JANUARY 1998

IEEE CINCINNATI SECTION NEWSLETTER

JANUARY MEETING

CHANGES IN THE ELECTRIC POWER INDUSTRY (Transmission Access, Retail Customer Choice)

DATE : Thursday, January 22, 1998

PLACE : Institute of Advanced Manufacturing Sciences (IAMS) - See map on Page 2

TIME :	5:30 PM (Social Time)	COST:	\$7.00 (Members)
	6:00 PM (Dinner)		\$3.00 (Students)
	7:00 PM (Program)		\$9.00 (Non-Members)
	8:30 PM (Approx.- Adjournment)		

RESERVATIONS ARE REQUIRED FOR DINNER ONLY !!!

Please call Dee Scott at **923-9546** by **Noon,**
Wednesday, January 21, 1998 if you plan to attend

ABOUT THE MEETING: The electric power industry is rapidly changing. In the transmission part of the business, recent federal legislation has required utilities to provide open access transmission service to customers on a non-discriminatory and comparable basis. This means electric utility companies must provide service to other users under the same terms, conditions, and price that it provides service to itself. Also, utility transmission/reliability personnel are required to be functionally separated from the utility wholesale marketing personnel.

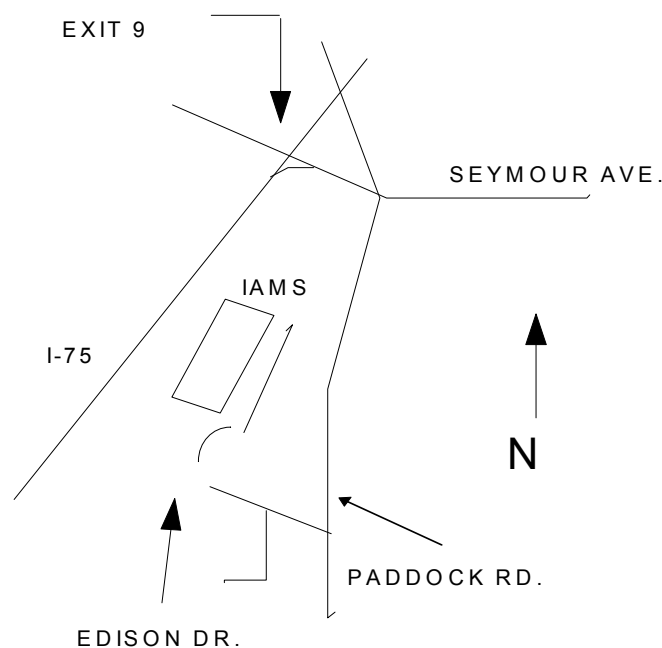
In the generation side of the business, electric energy is being treated as a commodity. Electric utilities are not the only buyers and sellers of electricity - electric power marketers and brokers are presently buying and selling billions of dollars of electricity annually in the wholesale markets. Electricity futures contracts have been developed and are traded daily. Competition in the wholesale markets is fierce and the strong movement towards retail customer choice is transforming the 200 billion dollar electric industry.

Our speakers will discuss the nature of the changes in the electric power industry and how it effects our businesses and our homes.

ABOUT THE SPEAKERS: John C. Procario, Vice President of Electric System Operations, Cinergy. Mr. Procario received a BS degree in electrical engineering and a MS degree from Ohio State University in 1973 and 1974. He has held various engineering and managerial positions with Cincinnati Gas & Electric beginning in 1974, including Manager of Electric Planning and Manager of Electric System Operations. After the merger with PSI Energy and CG&E, he became General Manager of Electric System Operations for Cinergy with responsibility for Control Area Operations and T&D operations. In September 1995, he became General Manager of Bulk Power Resource Management. In August 1996, he became Vice President of Electric System Operations responsible for Cinergy T&D operations, control area operations, bulk transmission planning and transmission tariffs. He has also taught in the College of Engineering at the University of Cincinnati since 1975 and is presently an Adjunct Professor of Electrical Engineering. Mr. Procario is a member of various industry organizations including the ECAR Executive Board and the NERC Engineering Committee.

Michael E. Martin, Vice President, Power Marketing & Trading, Cinergy Corp. As Vice President of Cinergy Power Marketing & Trading which is a Business Unit of Cinergy Services, Inc., Mr. Martin has over 24 years of experience in the electric utility industry having served for 20 of those years with Cinergy Corp. and its operating company affiliate PSI Energy in a variety of positions. From 1984-1987 he held the position of Manager, Generation and Transmission Planning for PSI Energy. During the 1987-1989 time period he was PSI's Manager/Director of Strategic Planning where he participated in the development of PSI's open access transmission tariff and market-based rate, wholesale firm power product offering, both firsts in the electric utility industry. During that period he also was involved on the Company's Electric Systems Strategy Group which examined operating efficiencies for the entire system and recommended improvements. His involvement in Off-System Marketing began in 1989 as Director of the PSI Wholesale Business Unit and later as Executive Director of the Company's System Planning, System Operations, and Wholesale Marketing. After the merger of CG&E and PSI he assumed his present position. Mr. Martin has both a Bachelors and Masters Degree in Electrical Engineering from Purdue University obtained in 1971 and 1973 respectively. He also received his Masters in Business Administration from Ball State University in 1988. He is a Registered Professional Engineer in the States of Indiana, Kentucky, and Ohio, having received original certification in New York State.

MAP TO IAMS



CHAIR'S MESSAGE

by Randy Holt, Section Chair

Happy New Year! Your Executive Committee is looking forward to providing you with some new and exciting meetings and newsletters this year. Stay tuned to our web site (<http://ieee.cincinnati.fuse.net>) for fast-breaking information, Dick Reiman's archives, etc.

How many of you have purchased a palmtop computer (aka HPC by Microsoft)? I got a Sharp Zaurus ZR-3500X a few months ago and then was given an HP 320LX. The power is pretty amazing on them both, and their compact sizes makes them very easy to carry with you. After looking pretty hard at them, however, I'm not convinced that a "killer" application for them has surfaced yet. The most valuable tool I've been using has been the scheduling program I keep organized (or try to!) using the Zaurus, and then "export" this information to my desktop PIM (Lotus Organizer 97) via software and a cable provided by Sharp. My "contacts" list is also pretty useful. Both of these palmtops have a word processor and a spreadsheet, but entering information with the small keyboard is pretty exasperating. If the bulk of a document or a spreadsheet is created on the desktop and then ported to the palmtop, you can avoid some of the mess. For the next semester I plan to do this for my class list and grades.

To avoid the keyboard problem, some software is being developed for handwriting recognition that permits you to use a stylus to write on the display and have that information converted to text that can become part of a document or a spreadsheet cell. I played with a demo and discovered that this software isn't quite there yet. A lot of my writing was badly misinterpreted. Once this software really "works," this could make the palmtops much more useful. Of course, a voice recognition capability would also be valuable, but I suspect it will require a much more sophisticated palmtop with lots more memory to run it.

If you're using such devices, let me know how they are valuable to you. Maybe we can create a column in our newsletter where we can make this kind of thing available to the rest of our members. Perhaps we can expand this idea to include "toys and tools" beyond the palmtops? Let me know what you think!

It's good to be back, and in a brand new year to boot!

The Personal Computer - Part 3

by Dick Reiman, Historian

In 1971, Intel which had been founded by Robert Noyce and Gordon Moore in Santa Clara, California in 1968, introduced a revolutionary new chip, the microprocessor. Its first application would be in a new line of programmable electronic calculators. The first electronic calculator had been introduced in 1963 by a British company, Bell Punch, using discrete transistors, and about the size of a cash register. Four years later, Texas Instruments introduced a smaller version using logic ICs and two types of memory chips, RAMs for storing numbers entered by the user and calculated by the machine, and ROMs for holding the internal operations and for procedures like finding square roots. Followed were smaller and cheaper versions, and the slide rule, the utilitarian holdover from the seventeenth century became obsolete.

In the summer of 1969, Busicom, a Japanese calculator manufacturer asked Intel to develop a logic and memory chips which would increase the number of transistors per chip from one thousand to three or five thousand. Intel had developed a two thousand version. Intel assigned the Busicom job to Marcian E. Hoff, Jr., a thirty two year

old engineer with a B.S. from Rensselaer Polytechnic Institute in Troy, New York, and a doctorate from Stanford. Hoff studied the Busicom design and decided it was much too complicated to be cost effective. Rather than design a specific chip for a specific task, he proposed to design a general purpose logic chip which would serve as a central processor of a computer and could perform any logic task. The microprocessor would be programmable, taking its instructions from RAM and ROM. Programming a calculator, Intel would write a calculator program and insert it into ROM. Each calculator would only need one programmed ROM, one microprocessor and several other chips. Programming the ROM for a digital clock, would also serve in the same way and preclude the design of a new logic chip for each customer. Now the burden of the design would shift to the customer with Intel doing a less costly and time-consuming programming for the ROM.

It was a brilliant idea. Busicom's calculator only need four chips, not twelve. The four were a microprocessor, a ROM, a RAM, and an input/output IC to relay user inputs and outputs. The microprocessor, a programmable processor on a chip, expands a device's capability and cuts its manufacturing costs. Busicom accepted Hoff's scheme, and the first microprocessor designated the 4004 was produced in late 1970s. In an agreement with Busicom, Intel decreased its price in exchange for the right to market the 4004.

How fortunate for Intel! No one grasp the importance of Hoff's invention which would go beyond calculators and minicomputers to be used in any control of a process. The 4004 would be replaced by the 8008, then the 8080 in 1974, and this would propel Intel a billion dollar company.

A MESSAGE FROM YOUR PACE CHAIRMAN

by Bill Lohner, PACE Chairman

"A Network of Professional Activities for Engineers"

Our PACE group to encourage technical and scientific education for precollege students had its second meeting in November. At this meeting we agreed on the following mission statement in principle. This is the mission statement of the IEEE Precollege Education Committee and is as follows:

" To effect improvements in the quality of precollege education and raise the level of functional and technological literacy of all students in the United States. The emphasis is on mathematics and science education, but includes other curriculum areas that are deemed a national need and within the interest, expertise, and ability of IEEE members to effect an improvement. "

Our group plans to personalize this statement for our PACE group. We plan to modify this statement at our next meeting. If any IEEE members who are reading this article have any suggestions please contact or send your suggestions to me. (Bill Lohner)

We have agreed to encourage the middle grades to take technical and scientific studies.

As a carry-over from the Nov.-Dec. PACE article we have contacted some high school counselors and will review the results at our next meeting. A meeting is being scheduled with a former Hamilton County curriculum advisor. Also, information has been obtained from IEEE as to what tools are available to encourage technical and scientific careers. We have obtained the following:

Newton's Apple Salutes Engineers (video)
Engineers, Turning Ideas Into Reality (video)
Engineer and Teacher Slinky Kit
Sloane Career Cornerstone Series-Electrical (video)
Bikes (video)

Our group plans to review these items and plan how to effectively use them.

We plan to start our program with Hamilton County schools and progress to cover the other school districts in our IEEE area, including northern Kentucky.

I would like to thank several of you who have expressed an interest in what we are doing. We will follow up on your suggestions and offers to help.

Bill Lohner
PACE Chairman
(513)-385-7268

IEEE NEWS

IEEE-USA NEWS BYTES

Engineers Support Doubling Federal Funding for R&D Over Next Decade

The IEEE joined more than 100 other societies at a news conference on Oct. 22 calling on the federal government to double its commitment to research and development over a 10-year period to secure the economic health and prosperity of the United States. Together, the societies issuing the statement represent more than one million engineers, scientists and mathematicians. According to IEEE-USA's Technology Policy Council, federal funding for science and engineering R&D has decreased from 5.7 percent of the budget in 1965 to 1.9 percent in 1997 -- even as other nations, such as Japan, are increasing government support. Endorsing the statement, IEEE President Charles K. Alexander said: "The current level and trend of federally supported activity in the United States threatens our nation's technical and economic viability. It is crucial that key policy makers realize federal investment in technology development creates whole industries and generates thousands of high-wage jobs."

Feds Warn of High-Tech Worker Shortage

The Department of Commerce on Sept. 29 released a report citing potential infotech labor shortages in the United States. The report, "America's New Deficit: The Shortage of Information Technology Workers," states that "Evidence is mounting that job growth in certain information technology fields now exceeds the production of talent." According to the report, the United States and other industrialized countries "will increasingly have to rely on policies and strategies directed at educating, training and retraining their domestic work forces." The report also noted IEEE-USA's suggested solutions to labor-market imbalances: "IEEE-USA suggests that the shortage problem is the result of a skills mismatch created by rapidly changing technology and the difficulty of keeping worker skills up-to-date. IEEE-USA advocates a focus on retraining the current work force, including engineers laid off in defense downsizing."

IEEE-USA Sounds Alarm on Encryption Bill

On Sept. 22 and 24, IEEE-USA participated in two coalition letters to the House Commerce Committee opposing amendments to the Security and Freedom Through Encryption Act (H.R. 695) that would impose new restrictions on the use of cryptography. The first letter argued that the proposed restrictions were "incompatible with the consumer, corporate, and national security benefits of the national information infrastructure." The second letter stated that the encryption restrictions would hamper "the open exchange of scientific information

and the progress of scientific research and development." Joining IEEE-USA were the American Academy for the Advancement of Science, the Internet Society and approximately 10 other organizations.

Rewarding Good Deeds

James F. Strother received the IEEE-USA Award for Distinguished Contributions to Engineering Professionalism for his many years of volunteer work to promote professional activities within IEEE's Regional and Technical Activities entities, as well as his participation and leadership in IEEE-USA committees. IEEE United States Activities Board Chair Dan Benigni presented the award during the IEEE-USA Professional Activities Conference on Aug. 31 in St. Petersburg, Fla. Other award winners include:

Professional Achievement: James O. Everly and Jack Sippel

Regional/Divisional Professional Leadership: Hernan Peña, Clarence Lee Stogner, Zafar Taqvi and Charles P. Rubenstein

Distinguished Literary Contributions Furthering Public Understanding of the Profession: T.A. Heppenheimer and

Ingrid Wickelgren

Distinguished Literary Contributions Furthering Engineering Professionalism: Karen W. Ferguson

Citation of Honor: Leann Kostek, Marlin Ristenbatt and Mauro Togneri

Harry Diamond Memorial Award: Edward E. Altshuler

IEEE-USA also gave Dr. Mary L. Good, who recently resigned as Under Secretary of Commerce for Technology, the Award for Distinguished Public Service.

February 3, 1998 Will Change The Way We Look At The World Through An Electron's Eye View Of The Faraday's Lecture

PISCATAWAY, NJ, November 7, 1997 - With his 1897 discovery of an electron, British physicist J.J. Thompson changed the world considerably. Flicking the light switch, turning on the radio, and using cellular phones are miracles that are taken for granted today. However, causing these devices to operate would not be so simple without this technological breakthrough.

On February 3, 1998, the Institute of Electrical and Electronics Engineers, Inc., (IEEE), in the US, will downlink throughout North America a live broadcast of this year's Faraday lecture produced in Great Britain by the Institution of Electrical Engineers (IEE). The lecture, free of charge to participating organizations, is entitled Bright Sparks of the Universe - An Electron's Eye View. It will document the discovery of the electron and how it affected our views of the world.

Professors Frank Close and Bryson Gore will deliver the presentation in conjunction with the Science Museum of London. This engaging, PBS-quality program is one hour long and includes colorful background, demonstrations and experiments using audience participants. Students from high schools and middle schools will be able to easily comprehend and appreciate the program through clear explanations of complex technical concepts. Participating schools can also request the IEEE local sections to provide them with an on-site engineering professional who can answer questions about the lecture topics.

Schools and other organizations can register for the Faraday lecture at no cost. For more information on how to receive this broadcast, contact:

IEEE,
445 Hoes Lane,

PO Box 1331,
Piscataway, NJ 08855-1331.
Phone: (732) 562-5595;
Fax: (732) 981-1686;
E-mail: t.garnys@ieee.org.

IEEE MEMBERS CHOOSE KENNETH R. LAKER AS 1998 PRESIDENT-ELECT

PISCATAWAY, N.J., 7 Nov. 1997 - Kenneth R. Laker, professor of Electrical Engineering, University of Pennsylvania, Philadelphia, has been elected 1998 president-elect of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). Dr. Laker will begin serving as IEEE president on 1 Jan. 1999 succeeding 1998 IEEE president Dr. Joseph Bordogna, deputy director, National Science Foundation.

Of the 229,627 ballots mailed to IEEE voting members, 39,861 valid ballots (17.36 percent) were returned. This compares with 19.66 percent in 1996.

Dr. Laker, who was nominated by petition for the office of president-elect, was one of three candidates seeking this office. The other two candidates, nominated by the IEEE Board of Directors, were Donald M. Bolle, professor of Electrical Engineering and director of the Weber Research Institute, Polytechnic University, Brooklyn, N.Y., and Joel B. Snyder, consulting engineer, Snyder Associates, Plainview, N.Y., and senior industry professor, Polytechnic University. Of the members who voted, 14,990 selected Laker. Snyder received 14,504 votes and Bolle received 14,145 votes.

Laker joined the Institute in 1970, became a senior member in 1978 and was named an IEEE Fellow in 1983. He served on the Board of Directors from 1992 to 95. He was vice president of Educational Activities from 1994 to 95 and Division I director from 1992 - 94. Currently he is a member of the Evolutionary Task Force and Technical Program co-chair of the 1998 International Symposium on Circuits and Systems.

He served as chair of the Electronic Communications Steering Committee in 1992 - 94, and has been as a member of numerous other boards and committees including the Technical Activities Board from 1992 - 94 and from 1983 - 84; the Publications Board from 1990 - 91; and the New Technology Directions Committee in 1991. In 1994 - 95 he was chair of the Philadelphia Section, and in 1983 - 84 he served as president of the Circuits and Systems Society.

Other Officers Named:

The following candidates were elected as division director: Division I, Michael Lightner; Division III, David G. Daut; Division VII, Leonard L. Grigsby; and Division IX, Edward K. Reedy. They will assume office on 1 Jan 1998.

Taking office on 1 Jan. 1999, these candidates were selected as director-elect: Division IV, William G. Gjertson; Division VIII, Barry W. Johnson; Region 2, Joseph A. Kalasky; Region 4, Robert D. Adams; Region 8, Rolf A. Remshardt; and Region 10, Takuo Sugano.

These candidates were selected as director-elect and will take office on 1 Jan 2000: Region 1, Irving Engelson; Region 3, Richard L. Riddle; Region 7, Celia L. Desmond; and Region 9, Pedro A. Ray.

Elected as the first president of IEEE-USA was John R. Reinert, project director of ASIC programs at Microelectronics Systems in Colorado Springs and a faculty member in the Electrical and Computer

Engineering department at the University of Colorado. He will assume the office on 1 Jan. 1998. Reinert is currently on the IEEE Board of Directors, is director of Region V, and serves on the IEEE United States Activities Board and the IEEE Regional Activities Board.

Paul Kostek, senior systems engineer with TekSci, a Seattle software consulting firm, was selected as IEEE-USA president-elect to take office on 1 Jan. 1999. He presently serves as chair of IEEE-USA's Career Policy Council. Taking office as IEEE-USA member-at large on 1 Jan. 1998, are Jerry C. Aukland who will serve for a one year term and Frank E. Lord who will serve a two-year term.

The following were elected as IEEE-USA officers at yesterday's meeting of the United States Activities Board in Atlanta:

1998 IEEE-USA VICE PRESIDENTS: Vice President, Career Policy: Michael R. Andrews; Vice President, Member Activities: Jean M. Eason; Vice President, Technology Policy: Ned R. Sauthoff; Vice President, Professional Activities: Joseph V. Lillie; Vice President, Operations: Gerard A. Alphonse; Secretary-Treasurer: Arthur Van Gelder

IEEE-USA also announced candidates for the 1998 ballot:

1999 IEEE-USA PRESIDENT-ELECT: Merrill W. Buckley and Charles S. Lessard

1999-2000 MEMBER-AT-LARGE: Michael C. Mulder and Robert P. Noberini

The three constitutional amendments on the ballot were automatically defeated because the voter return was less than the required 20 percent. The IEEE Constitution calls for a minimum of a 20 percent return with two-thirds voter approval for adoption of amendments.

IEEE ASSEMBLY ELECTS BOARD MEMBERS FOR 1998 Board Names Three President-Elect Candidates for 1998 Elections

PISCATAWAY, N.J., 10 Nov -- The IEEE Assembly has elected board members for 1998 during the meeting of the Assembly and the Board of Directors in Atlanta.

Re-elected to their second one-year term were Friedolf M. Smits, vice president, Publication Activities and Lloyd A. (Pete) Morley, vice president, Technical Activities.

Newly elected were Arthur Winston, vice president, Educational Activities; Daniel R. Benigni, vice president, Regional Activities; L. John Rankine, vice president, Standards Activities; Antonio C. Bastos, secretary; and Bruce A. Eisenstein, treasurer.

The officers will begin their term on 1 Jan 1998 led by 1998 IEEE President Joseph Bordogna.

The IEEE Board of Directors has nominated three candidates for 1999 president-elect. They are Bruce A. Eisenstein, professor of electrical and computer engineering, Drexel University, Philadelphia; Raymond D. Findlay, professor of electrical and computer engineering, McMaster University, Hamilton, Ontario; and Joel B. Snyder, consulting engineer, Snyder Associates, Plainview, N.Y., and senior industry professor, Polytechnic University, Brooklyn, N.Y.

IEEE-USA LAUNCHES INITIATIVE TO ASSIST OLDER PROFESSIONALS

WASHINGTON, Nov. 21, 1997 – The IEEE's U.S.-activities division announced that it will develop a set of new and expanded programs to address the special career and employment needs of older U.S. electrotechnology workers. According to IEEE-USA, these professionals increasingly struggle with the challenges created by the accelerating pace of technological change and shifts in corporate culture that favor younger, often cheaper high-tech workers recently trained in skills and technologies in high demand by U.S. industry.

"Many senior professionals are telling us that they are having trouble getting and keeping good jobs in this supposedly tight labor market," said Paul J. Kostek, chair of the IEEE-USA Career Policy Council. "Our own studies bear this out, showing that involuntary retirement is at record levels, a disturbing percentage of older members say they have been subject to age discrimination in their organizations, and advancing age has a significant effect in increasing the term of unemployment for jobless workers."

Several IEEE-USA committees meeting at a special October summit to address the plight of older workers developed an action plan to enhance these professionals' lifelong employability. "What we came up with is a broad-based approach that we hope will help individual members with their multifaceted career challenges as well as induce employers to value and more effectively utilize their senior workforce," said Kostek. "Younger workers also can take advantage of these programs to improve their career planning and minimize problems later on," he added.

The new initiatives include developing a career-planning standard for older workers, disseminating information necessary for long-term career planning, encouraging licensing and registration and lifelong learning, assisting members with the transition to entrepreneurial careers, publishing a "care package" for displaced engineers, creating a best-practices list for employers. In addition, IEEE-USA will issue status reports on the new activities next year at its Tenth Biennial Careers Conference and 1998 Professional Activities Conference. Spearheading the programs will be IEEE-USA's Career Maintenance and Development, Workforce, Licensure and Registration, and Employment Assistance Committees.

For more information on existing and future IEEE-USA career and employment resources, contact IEEE-USA at 202-785-0017 or ieeusa@ieee.org, or visit its Web site at URL <<http://www.ieee.org/usab>>.

IT'S NEW AGAIN!

National Engineers Week 1998 (NEW) is coming soon. This event was developed primarily to raise public awareness of the contributions engineers continue to make to their communities. In past years, IEEE Sections, Chapters, and Student Branches have reported great results from participation in this event. It gave them a chance to be creative, increase awareness of and excitement about their field, and get satisfaction from seeing their promotional efforts become a reality.

NEW 1998 is scheduled for 22-28 February, but it's important to start planning now. The good news is: there is help available. Free planning kits for National Engineers Week are now available from the IEEE-USA office. Contact Bernice Evans for more information.

IEEE ComSoc Agrees to Link '99 Wireless Conf to PCIA Event

NEW YORK, 1 December 1997 -- The IEEE Communications Society has signed an agreement with the Personal Communications Industry Association to hold the IEEE Wireless Communications and Conference (WCNC) in conjunction with PCIA's Personal Communications Showcase '99 (PCS '99) in New Orleans, 22-27 Sept 1999.

The official agreement was signed by IEEE Communications Society President Steve Weinstein; Tom Plevyak, president-elect; Jack Howell, executive director; and PCIA President Jay Kitchen. "The partnering provides a great opportunity for both the IEEE and the PCIA to broaden their reach," said Weinstein. "Together WNCN and PCS '99 provide a forum that will enable conference participants to draw from the full spectrum of information -- from technical development to product delivery -- required to maintain a competitive edge "

With the addition of WCNC's programming, technical depth is assured for show attendees according to technical program chair Jerry Gibson, Southern Methodist University EE department chair and well-known editor and author in the mobile communications field. "Our call for papers and tutorials will feature the following wireless topics: ATM, Internet, multimedia, networking, and standards. It also will cover smart antennas, channel assignment schemes, compression, handoff algorithms, mobility, modulation and coding, multiple access techniques, power control, security and field studies," said Gibson.

IEEE Communications Society technical committees to be directly involved are Personal Communications, Communications Theory, Computer Communications, Radio Communications, and Satellite and Space Communication.

The IEEE Wireless Communications and Networking Conference (WCNC), an expanded format of the IEEE International Conference on Universal Personal Communication (ICUPC), is the world's foremost international technical conference for engineers and researchers at the forefront of development and deployment of digital cellular, PCS and the full spectrum of supporting wireless technologies.

TECHNOLOGY PIONEERS TO RECEIVE TOP IEEE MEDALS

PISCATAWAY, N.J., 12 December - The 1998 IEEE Medal of Honor has been awarded to a researcher and educator whose pioneering work on computer-aided circuit design has profoundly affected the success of the semiconductor and electronics industries.

Donald O. Pederson, professor emeritus of Electrical Engineering, University of California, Berkeley, has been named recipient of the highest honor for creation of the SPICE Program, a means of simulating circuit design that has been universally used for more than twenty-five years. Today, SPICE design is the benchmark for new integrated-circuit simulation technology. The IEEE Medal of Honor is sponsored by the IEEE Foundation.

Sixteen other engineers, scientists and industry leaders from India, New Zealand, the United Kingdom and the United States, and one U.S. corporation also have been singled out by the IEEE for their contributions to electrical, electronics and computer engineering, and to their profession.

Receiving these IEEE awards are:

* Microsoft Corporation -- the IEEE Corporate Innovation Recognition "for making computer technology accessible to the home, business and classroom through its innovative software developments."

* Richard E. Blahut, professor of Electrical and Computer Engineering and research professor at the Coordinated Science Laboratory, University of Illinois at Urbana -- the IEEE Alexander Graham Bell Medal, sponsored by Lucent Technologies "for contributions to error-control coding, particularly by combining algebraic coding theory and digital transform techniques."

* IBM Fellow Rolf Landauer, IBM Corporation, T.J. Watson Research Center, Yorktown Heights, N.Y. -- the IEEE Edison Medal, sponsored by Hitachi, Ltd., Mitsubishi Electric Corporation and Toshiba Corporation of Japan, "for pioneering contributions to the physics of computing and conduction."

* Stephen W. Director, dean of Engineering, University of Michigan, Ann Arbor, Mich. -- the IEEE Education Medal "for contributions to electrical engineering education through innovative textbooks, leadership in undergraduate curriculum reform, and inspired graduate teaching." The award is sponsored by the IEEE Foundation.

* C. James Erickson, Principal Consultant, Engineering Department (Retired), E.I. duPont de Nemours & Co., Newark, Del. -- the IEEE Medal For Engineering Excellence. Sponsored by Siemens AG, Munich, the award recognizes Erickson "for engineering contributions to the technology of industrial process heating and associated control systems, and development of related standards."

* Alan W. Rudge, deputy group managing director, British Telecom, London, England, UK-- the IEEE Founders Medal, sponsored by IEEE Foundation, "for distinguished leadership in the field of telecommunications and for advancement of the electrical and electronic engineering profession."

* David D. Clark, senior research scientist, Massachusetts Institute of Technology, Cambridge, Mass. -- the IEEE Richard W. Hamming Medal. Sponsored by Lucent Technologies, the award recognizes Clark "for leadership and major contributions to the architecture of the Internet as a universal information medium."

* Chen To Tai, professor emeritus, Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, Mich. -- the IEEE Heinrich Hertz Medal. Sponsored by the IEEE Foundation and Siemens AG Munich, the award recognizes Chen's "outstanding contributions to electromagnetic and antenna theory, and the development and application of Green's dyadics."

* Thomas G. Stockham, professor emeritus, Department of Electrical Engineering and Computer Science, University of Utah, Salt Lake City -- the IEEE Jack S. Kilby Signal Processing Medal. Sponsored by Texas Instruments, the award honors Stockham "for pioneering the field of digital audio processing."

* Herbert H. Woodson, Ernest H. Cockrell Centennial Chair Emeritus in Engineering, University of Texas at Austin -- the IEEE Lamme Medal. The 1998 award is sponsored by the IEEE Foundation and Westinghouse Foundation, and recognizes Woodson "for leadership in research and technology in the field of pulsed-power and energy-conversion systems."

* Ivan Edward Sutherland, vice president and Fellow, Sun Microsystems Laboratories, Palo Alto, Calif.-- the IEEE John Von Neumann Medal "for pioneering contributions to computer graphics and microelectronic design, and leadership in the support of computer science and engineering research." The award is sponsored by IBM Corporation.

* Jerome Swartz, chairman of the board and chief executive officer, Symbol Technologies, Holtsville, N.Y., and Angus McMillan Tait, managing director, Tait Electronics, Christchurch, New Zealand, each have been named recipient of an IEEE Ernst Weber Engineering Leadership Recognition. Swartz is being honored for "exceptional technical and managerial leadership in the development of an industry based on mobile bar-code scanners and related data transaction systems." Tait has earned the Ernst Weber award for leadership and contributions in creating and expanding radio communication approaches that achieved international recognition and success.

* H. Troy Nagle, Jr., professor, Electrical and Computer Engineering, North Carolina State University, Raleigh - the IEEE Richard M. Emberson Award, sponsored by IEEE Technical Activities Board, "for outstanding technical leadership and dedication to the Institute, particularly in preparing for the challenges of the 21st century."

* Frederick T. Andrews, consultant, Colts Neck, N.J. -- the IEEE Haraden Pratt Award. It is sponsored by IEEE Foundation "for sustained contributions and commitment to the Institute, particularly for leadership in strategic planning and electronic product development."

* Pavaguda Venkata Indiresan, president, Indian National Academy of Engineering, New Delhi, India, -- named as Honorary Member "for contributions to the growth of electrical engineering in India through his leadership in education, applied research and professional engineering institutions."

* Sheila E. Widnall, former Secretary, United States Air Force, Washington, D.C.-- named as Honorary Member "for outstanding leadership to United States Air Force science and technology."

The IEEE awards will be presented at special ceremonies in 1998.

CINCINNATI SECTION ELECTION RESULTS

Laurie Tappel was elected as our new Member-At-Large in the election for which ballots were included in the November/December 1997 Cincinnati Section Newsletter. We wish to welcome Laurie to the Executive Committee and look forward to working with her in the future.

NEW MEMBERS

The following individuals are new IEEE members who are in our Section:

JACK CONNERTON	STEPHEN K. LAMBERT	MAHMOOD SAMIEE
ERIC K. DONKOH	DENNIS C. MERRIT	DANIEL S. SCHUL
RICHARD M. FRANZA	GAVIN M. MONSON	WEIXIAN SHEN
SCOTT L. KILLMEYER	KENNETH A. MORY	BRIAN STADNIK
TED H. KRAMER	JOHN R. PARKER	DAVID A. STUART
DAVID P. KRUMPACK	AMY LOUISE PETTICREW	JEREMY M. WILCH
OLEH BORYS KRUTKO		

The following individuals are existing IEEE members who have moved into the Cincinnati Section:

GORDON R. BEATTY	MARK A. HENRY	JAMES P. MORRIS
ELIZABETH A. BEECHER	JOHN A. JORDAN	C. R. NIX
GREGORY H. CECIL	AJAY D. KSHEMKALYANI	JOYA VANDIVIER
TROY M. CLARKSON	MATTHEW E. MACBETH	THOMAS R. WAGNER
ROBERT A. CRAWFORD	JACQUES MAHNICH	KATHLENE WEST
JIM D. FREEZE	E. J. MARTIN	W. E. WHITE
ALAN K. GALAN	MICHAEL W. MATTINGLY	JOHN S. WILCOX
JONATHAN M. HAYLOCK	R. D. MICHELINI	

We wish to extend our welcome to all of our Section's new members!!!

Dee Scott (call for meeting reservations)

Randy Holt - Chairman

Bob Haas - Vice Chairman

Orest Melnyk - Treasurer

Chris Anderson - Secretary

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